







Commerce

What is H&L Advantage?



- H&L Advantage is located in Grandville, Michigan
- It is a small injection molding manufacturer that supplies to the office furniture sector.
- It employs 60 people
- 40 years in the business







How H&L Got Involved In the Green Suppliers Network?



- Letter from OEM's supply chain department
- Webcast with EPA, our OEM, and GSN representatives
- Internal reviews whether to participate
- Formal acceptance by H&L Advantage











- Supplier: H&L Advantage
- NIST MEP center: West Michigan's Manufacturing Technology Center
 - MEP center offered both the lean and environmental expertise.
 - Since the review, H&L Advantage has worked closely with the Michigan Department of Environmental Quality on implementing environmental projects (MDEQ).







GSN Lean and Clean Review



- 1. Scheduled on-site review, workshop, and training
- 2. Met to discuss which production process / product to focus on
- 3. Current value stream of pertinent production lines
- 4. Future value stream of pertinent production lines
- 5. Various improvements identified and highlighted
- 6. GSN assessment completed; report provided showing waste and cost reduction opportunities







Benchmarking to Decide Product/ Process Focus



Performance Measures

- Location:
- Products:
- Number of Employees:
- Customers:
- Facility Size:
- Equipment:
- Inventory
- Inventory Turns

H&L's Profile

- Grandville, MI
- Injection Molding and Product Assembly
- Hourly XX
 Salary XX
 Total XXX
- Office Furniture Sector
- XXX Square Feet
- XX Molding Machines
 XX Sonic Welders
 XX Assembly stations
- \$XXXXXX
- XX







5S Activities - The First Step Toward Implementation



- Sort
- Set in order
- Shine
- Standardize
- Sustain











- Continuous improvement eliminate waste
- Enlisted the assistance of OEM for kaizen training
- Conducted individual kaizen events for production lines which support the selected process / product
- Instituted appropriate improvements







Results



- Cleaner, better organized plant
- Reduction of Work in Process
- Decreased storage requirements
- Increased manufacturing space
- Remarkable awareness of our employees' capabilities











Expand lean manufacturing principles to entire operation

- Increase manufacturing capabilities
 - Increase open space for equipment and ability to add new equipment, processes, and capacity
- New equipment, new processes
 - Installed new transformer to support more efficient power usage
 - Investigate more environmentally-friendly chemicals for chillers
 - Investigate new hydraulic oil recycling / reuse opportunities
 - Investigate more recycling opportunities







Green Suppliers Network Aligns With Business Goals



